# Missouri Mitigation

A Publication of the Mitigation and Floodplain Management Section



Missouri's George Riedel (center) accepts the Tom Lee State Award for Excellence.



### **Next Round of Pre-Disaster Mitigation Competitive (PDM-C) Grants**

Once FEMA releases the guidance for the next round of PDM-C grants, SEMA will send the announcement details to local officials and RPCs. This will present more opportunities to help communities to fund flood buyouts, community tornado safe rooms, mitigation of bridges and culverts, etc. Please watch for the details in the announcement.

## Missouri Takes Two National Awards

Two (2) national awards went to Missourians at the Association of State Floodplain Managers (ASFPM) Annual Conference, which was held in May in Biloxi, Mississippi.

The "Tom Lee State Award for Excellence" recognizes an outstanding floodplain management program or activity at the state level.

Missouri State Emergency Management Agency (SEMA) was presented "Honorable Mention" for the Tom Lee State Award for Missouri Mapping Needs Assessment Project. SEMA contacted 22 counties and 179 communities to determine their mapping needs. These mapping needs were provided to the Federal Emergency Management Agency (FEMA) to ensure communities receive quality flood maps.

The "Jerry Louthain Award for Distinguished Service" is named in honor of contributions made to the Association by Jerry Louthain. This award is given by the Association to individuals who through their long-term efforts have clearly influenced the work and credibility of the Association.

The 2004 ASFPM Jerry Louthain Award was presented to George Riedel. George's floodplain management career began in 1995 when he joined SEMA. Soon thereafter, George became active in the ASFPM. In 1998, George became Treasurer of the Association. After serving two terms, he was elected Vice Chair in 2000 and was elected Chair in 2001. In 2003, after serving two terms as Chair, George was appointed as the Chair of the No Adverse Impact (NAI) Steering Committee and Chair of the Standing Conference Committee – both positions which he currently holds. In the past, George impacted the ASFPM in numerous and beneficial ways:

Assisted with the development and implementation of financial management that has resulted in financial stability for ASFPM.

- Serves as co-host for the record-setting 2003 Conference in St. Louis, Missouri (at the same time he was Chair of ASFPM).
- Created and guided the NAI Steering Committee for the past 3 years, which is integral to the development of ideas, products, and marketing of NAI.
- Recruited countless volunteers and future leaders to serve ASEPM

When not volunteering for ASFPM, George is the Branch Chief of the Floodplain/Mitigation Section for the Missouri State Emergency Management Agency.

#### **State Hazard Mitigation Plan Approved**

Missouri was the first of the fifty states to receive the Department of Homeland Security, Federal Emergency Management Agency's (FEMA) approval of a "Standard" State Hazard Mitigation Plan on May 21, 2004. The "Standard" Plan approval was a notable achievement because it guaranteed that the State of Missouri would continue to be eligible after November 1, 2004 to receive the full range of federal assistance funding provided by the Stafford Act. Federal mitigation funding includes FEMA's Hazard Mitigation Grant Program, Flood Mitigation Assistance Program, and Pre-Disaster Mitigation – Competitive Program.

Effective Friday, July 2, 2004, FEMA Region VII Director Dick Hainje announced that Missouri's "Enhanced" State Hazard Mitigation Plan also had earned approval. Missouri will now be eligible to receive a 20% multiplier for future mitigation projects within the state. By comparison, if the widespread tornado damage that happened in May 2003 were to occur today, the mitigation funding would be \$5.3 million instead of only the \$2.0 million that was available using the old 7.5% base. State Plan Vital to Mitigation Funding

These federally funded mitigation programs have been vital to Missouri's efforts to acquire more than 4,500 flood-damaged homes since 1993 and to replace Prospect Bridge and redirect the creek channel on Woodland Avenue in Kansas City after seven people died in the 1998 flooding there. More recently, SEMA has been able to obtain FEMA's approval to fund the pending construction of community tornado saferooms in Bolivar, Houston, Osage Beach, Pierce City and Stockton.

#### **Certain Public Assistance and the State Plan**

In addition, the approval also continued Missouri's eligibility to receive all categories of Public Assistance. Federal funding from these programs are being applied to public assistance projects such as the City Hall, armory, police station, community center and others in Pierce City, Stockton, Carl Junction and other locations. Without approval of a "Standard" State Hazard Mitigation Plan, only emergency public and individual assistance would have been available beyond the November 1, 2004 cutoff date.

#### National Flood Insurance Program Workshops Set for Fall 2004

Six (6) one-day National Flood Insurance Program (NFIP) workshops will begin in October 2004. The workshops are keyed to assist Insurance Agents, Lenders, Real Estate Agents, Land Surveyors, Engineers, Architects, Real Estate Appraisers, Building Officials and Code Administrators, Certified Floodplain Managers, and Government officials with a better understanding of the National Flood Insurance Program.

The workshops dates are:

October 13, 2004: Sunset Hills City Hall, Assembly Room, 3939 South Lindbergh Boulevard, Sunset Hills.

**October 14, 2004**: Webster Groves Parks and Recreation Meeting Room, 33 East Glendale, Webster Groves.

**November 9, 2004**: Cass County Public Library, Meeting Room, Pierson Hall, 400 East Mechanic, Harrisonville.

November 10, 2004: Liberty Community Center, 1600 South Withers, Liberty. November 30, 2004: Willow Springs Municipal Golf Course, 1708 State Route 137, Willow Springs.

**December 1, 2004**: Springfield-Green County Public Library, Library Center Meeting Rooms: A & B, 4653 South Campbell, Springfield.

The morning session is from 8:00 a.m. to noon. "NFIP: ICC and Disconnects" is presented by NFIP Region VII. The afternoon session is from 1:00 p.m. – 5 p.m. "NFIP – 2005" is presented by the Missouri State Emergency Management Agency (SEMA). Participants will learn about terminology, regulations, construction requirements, floodplain maps, mandatory purchase requirements, legislative updates, and compliance requirements.

Continuing Education Credits and PDH's are available for Certified Floodplain Managers, Insurance Agents, Real Estate Appraisers, Land Surveyors, Building & Code Administrators (ICC).

Local officials may attend the workshops at no charge. A \$30 fee will apply to non-government officials and is payable to Johnson County Community College Additional information on the upcoming workshops may be obtained by calling SEMA at 573-526-9115.

#### Local Mitigation Plans Essential Also

Likewise, by November 1, 2004, all local governments are still required to develop and obtain FEMA's approval of a local hazard mitigation plan in order to be eligible for Federal mitigation funding. SEMA has been working for over a year with the 19 Regional Planning Commissions located throughout the state and local jurisdictions to develop local mitigation plans covering 103 counties and the communities incorporated within those counties. Many of these plans are nearing completion and the remaining plans currently under development should be completed by next summer. Of the initial 21 plans reviewed by FEMA, 11 plans will be approved as soon as the official adoption resolutions are submitted. The other 10 plans need only very minor changes and will soon be ready for approval as soon as FEMA Region VII's reviewers receive the official adoption resolutions. Once additional HMGP funding becomes available, SEMA hopes to assist the remaining counties to develop plans.

#### Missouri's First Disaster Resistant University

On August 18, 2004, FEMA Region VII Director Dick Hainje announced that Metropolitan Community Colleges (MCC) of Kansas City, Missouri has been selected as the first Disaster Resistant University in the State of Missouri! The State Emergency Management Agency (SEMA) is delighted that MCC has earned a place among a small group of distinguished educational institutions nationwide. MCC's efforts to minimize disaster damages to the students, staff, faculty and facilities on its five colleges in four communities in the greater Kansas City area are highly commendable. As a result of the selection, SEMA was honored to award \$100,000 in federal funds that will be used to develop the Metropolitan Community Colleges' Hazard Mitigation Plan.

#### KC's Prospect Bridge/Brush Creek Mitigation Project Receives \$4.3 Million

Kansas City received two Hazard Mitigation Grant checks for reimbursement totaling \$4.3 Million for the Prospect Bridge/Brush Creek Project. In August, Kansas City received a check for \$2 million and earlier in June the city received a check for \$2.3 Million. Kansas City expects to complete the Prospect Bridge Project around the end of September 2004.

In 1998, seven people were killed when their vehicles were swept off Prospect Bridge by severe flash flooding.

The Prospect Bridge Project is being funded under the Department of Homeland Security's Federal Emergency Management Agency's (FEMA) Hazard Mitigation Grant Program (HMGP) for \$7,200,000 (\$5,400,000 Federal funding and \$1,800,000 is a Non-Federal match by Kansas City).

SEMA is responsible for overseeing the financial management of this federal grant, and another Kansas City project that is realigning the Woodland Avenue creek channel. The Woodland Avenue Project will cost \$1,836,892 (Federal funding of \$1,377,669 and Kansas City funding of \$459,223).

Kansas City Public Works and the U.S. Army Corps of Engineers are straightening and deepening approximately 2,200 feet of the channel and relocating the new bridge south of the old area. When completed, the transit point will be much safer for the more than 10,000 vehicles that use the bridge daily.

#### 100 Floodplain Professionals Attended Letter of Map Change Workshops (LOMC)



William (Bill) Walker a Professional Engineer with PBS&J conducted four (4) workshops in Missouri in reference to the Federal Emergency Management Agency's (FEMA's) requirements for changes to the National Flood Insurance Program (NFIP) flood maps. The one-day training gave participants a step-by-step analysis of how to submit the forms and technical data to FEMA for review and determine whether an area warrants removal from the special flood hazard area (SFHA).

The success of the training was apparent with the positive feed back from a number of the participants. The LOMC training was conducted in Independence, Springfield, Cape Girardeau and

Maryland Heights, Missouri. The co-sponsor of the workshops, the Missouri Floodplain and Stormwater Management Association (MFSMA) plans to offer a variety of workshops in reference to the NFIP in the future. Janet Sanders, MFSMA President gave the LOMC workshop thumbs up after she attended the training in Cape Girardeau. Sanders said "Missouri needs more professional training like the LOMC Workshops in future".

#### Nation's Floodplain Managers Met at Central Gulf Coast

The Association of State Floodplain Managers (ASFPM) convened the nation's flood protection experts at their 28th annual national conference in Biloxi, Mississippi, May 16-21, 2004, at the Beau Rivage Hotel. The ASFPM represents 6,500 floodplain management practitioners, including the leading experts in flood hazard management throughout the U.S. and beyond. Nearly every state in the U.S. was represented, as well as a number of internationals. (George Riedel, Dale Schmutzler, and Roger Connell represented Missouri's Floodplain Management Program.)

This year's theme "Lighting the Way to Floodplain Management", inspired over 950 government and private professionals with techniques to mitigate against the effects of flooding before floodwaters rise, the surest and most effective option for reducing the effects of future flooding. This premiere flood management training event in the country draws floodplain and stormwater managers from local/state/regional/federal government as well as engineers, consultants, researchers, insurance and nonprofit organization experts involved in floodplain mapping, mitigation, response and recovery, and related disciplines. Important discussions this year included reflections on the 35th anniversary of the deadly Hurricane Camille that ravaged that segment of the Gulf Coast and how the recovery process from that disaster has had an influence on national flood programs and policies.

ASFPM Chair Chad Berginnis, Ohio, notes that annual flood damages in the nation continue to increase, despite billions of dollars spent on flood control projects and numerous advances in non-structural floodplain management. ASFPM believes flood damages are increasing unnecessarily, thus the Association continues to advance the No Adverse Impact (NAI) strategy for community development. The NAI approach, introduced in June 2000, is premised on balancing management approaches to flood loss reduction throughout the watershed in a manner that will not cause additional flood damage on other properties. ASFPM's NAI Community Status Report (available on the ASFPM website) outlines how communities can implement No Adverse Impact approaches and details how some communities have incorporated NAI approaches that support sustainable community initiatives to reduce the devastation caused by natural disasters.

A key activity at the ASFPM national conference is to recognize national excellence in flood hazard management; there are ten award categories at state, local, and individual levels. Check the AFPM website, as below, for the categories and past recipients. This year's winners were announced at the annual Awards Luncheon on Thursday, May 20.

The dates for the  $29^{\text{th}}$  Annual ASFPM Conference are set for June 12-17, 2005 in Madison, Wisconsin.

# **Building Inspectors Must Use "Net" Not** "Gross" Space Area for Floodproofing Vents

Mr. Mike Grimm, Chief of the Community Assistance Section, Risk Assessment Branch, FEMA Mitigation Division, clarified what floodplain managers must consider when determining compliance of wet flood proofing and crawl space vent installations with NFIP criteria 44 CFR Section 60.30(c)(5). This regulation requires: "A minimum of two openings having a **total net area** of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade." The same regulation provides for the use of "... screens, louvers, valves, or other coverings or devices, provided that they permit the automatic entry and exit of floodwaters." However, using some type of cover **does not** authorize a reduction in the total net area of vent space that **must** be provided for a particular enclosed area. Additionally, the use of any vent closure mechanism that would impede the automatic free flow of floodwaters through the vent from either direction does not comply with the automatic entry and exit of floodwaters criteria of the section.

The bottom line is the net area of the vent opening must be provided for when wet floodproofing is being planned. This means that one must make sure that the area represented by the style and dimensions of any covering over a vent opening must be subtracted from the overall vent opening size. Net area can be measured, calculated, or be obtained from the manufacturers' specifications for the vent/vent cover. For subject structures using wet floodproofing vents, local officials need to make sure that the proposed venting complies with the community's floodplain ordinance and the minimum NFIP criteria, and that compliance documentation is maintained in the community files. The local officials have this responsibility, and it needs to be addressed for a structure during the plan review stage of the building permit application process. Follow-up inspections after vent installations and before issuance of the occupancy certification are important, and documentation of "as-built" venting compliance will complete the file on this issue.

Communities should not rely solely on a surveyor's Elevation Certificate (current FEMA form) to provide adequate documentation of compliance with net area venting criteria, since it is the community's responsibility to inspect and determine compliance with its floodplain management ordinance for the size, number, and location of the vent openings. FEMA intends to clarify the Elevation Certificate form currently being used to include a section for recording "total net area of the flood openings." They also intend to provide instructions for the surveyor on how to estimate the net open area, excluding bars, louvers, or other covers. Updates are also intended for Technical Bulletin 1-93, "Openings in Foundation Walls" in order provide clearer guidance on determining "total net area" for floodproofing vents.

# "Tools of Floodplain Management" Dates Set for 2005

The National Flood Insurance Program (NFIP) "Tools of Floodplain Management" course dates for 2005 have been set. The two-day training courses for 2005 are scheduled to be held March 15 &16, July 12 & 13, and September 20 & 21. This two-day training course starts at 1:30 pm on the first day of training and concludes at 3:00 pm the following day.

In order to direct as much personal training to each attendee, the class limit has been set for twenty-five (25). The hands-on training obtained during this two-day course will be beneficial to all local officials who work directly with the NFIP. Upon completion, attendees will have a good understanding of the day-to-day application of the community's role in the NFIP.

"Tools of Floodplain Management" is accredited for eight (8) hours of continuing education credits for International Code Council (ICC) and nine (9) hours of continuing education credits for Certified Floodplain Managers (CFM).

Call Pam Huhmann at 573-526-9115 to register now for the March 2005 class.

#### No Adverse Impact Questions &

#### **Answers**

Q: What can be done to help people understand NAI and what it can do?

A: One of the most important state roles in advancing NAI floodplain management is providing information to local governments, officials, and staff about the wisdom of this approach.

Floodplain managers understand the situation: most current floodplain management practices (unfortunately, the ones most communities have put in their ordinances to meet NFIP criteria) deal with how communities build in flood hazard areas, but generally ignore how such activities create and transfer flood impacts onto other properties. The minimum standards allow floodwaters to be diverted onto other properties and conveyance areas to be reduced, result in the filling of essential valley storage, and increase water velocities. And some traditional floodplain management places undue burdens on those who are adversely affected, and is economically unsustainable.

These are complex realities that may have little immediate meaning to those outside the profession. As a first step in convincing local officials, it is smart to realize that different explanations and arguments appeal to different people. Try some of these "sound bite" ideas for persuasion.

The traditional approach to local floodplain management (meeting minimum standards and thereby ignoring most transference of impacts) increases liability for community officials and design professionals—even though they comply with "the standards."

NAI is a "good neighbor" approach that does not preclude development; instead it identifies the impact of development and finds ways to minimize its negative consequences.

NAI floodplain management is not a rigid rule. It is a general guide that can be used in different ways.

It can be the default approach for community planning. It can be an overall goal for a community that is developing a comprehensive watershed and floodplain management program. It can be a basis for local evaluation of current standards.